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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/658,598

09/08/2003

Henry W. Babel

A-1955

1924

33197

7590

07/20/2005

EXAMINER

WYSZOMIERSKI, GEORGE P

STOUT, UXA, BUYAN & MULLINS LLP
4 VENTURE, SUITE 300
IRVINE, CA 92618

ART UNIT

PAPER NUMBER

1742

DATE MAILED: 07/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/658,598

Applicant(s)

BABEL ET AL.

Examiner

George P. Wyszomierski

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1742

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9 and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2001-001059, in view of Shrayner et al. (U.S. Patent 6,199,419).

The JP '059 reference discloses friction stir welding of several aluminum sheets to form a flat plate, followed by a step of pressing or drawing to produce a parabolic shaped material. JP '059 does not indicate that the latter step entails "spin forming" or the various sub-steps recited in claim 1 as amended, does not disclose the dimensions as recited in claims 4, 5, 11 and 12, and does not disclose annealing prior to spin forming as required by claims 6, 8, and 13-15 or friction stir welding of pieces that are in an annealed condition as defined in claims 9 and 16. However,

a) The Shrayner patent indicates that it was known in the art, at the time of the invention, to form dome-shaped articles from a flat blank by spin forming, and further discloses that spin forming includes the steps recited in claim 1 as amended. Note particularly Shrayner column 6, lines 1-20.

b) With respect to the dimensions, the processes as disclosed in the prior art would be amenable to being performed upon material of any desired dimensions, limited only by the capabilities of the apparatus being used in a given process. Clearly one of ordinary skill in the art would have easily been able to coordinate the proper tools and materials necessary to perform the prior art processes upon objects having the presently claimed dimensions.

c) With respect to annealing, Shrayer claim 6 indicates that it was well-known in the art, at the time of the invention, to anneal aluminum alloy blanks prior to spinning. Further, with regard to instant claims 9 and 16, the examiner notes that the instant claims do not positively recite an annealing step but merely allude to one, i.e. material is processed that is in an annealed temper or condition. It is not possible to determine, in any of the prior art references, all of the possible treatments (including annealing) that the materials processed therein may or may not have been subjected to. Nonetheless, the processes of JP '059 or Shrayer would be applicable to being applied to annealed aluminum materials.

Consequently, the combined disclosures of JP '059 and Shrayer et al. would have taught the presently claimed invention to one of ordinary skill in the art.

3. In a response filed June 3, 2005, Applicant alleges that the claimed invention can be distinguished from JP '059 in that the '059 reference does not disclose spin forming or its associated sub-steps. This is not persuasive of patentability because the Shrayer patent shows the conventionality of spin forming and all its attendant steps upon a material analogous to that used in the JP '059 process.

Applicant further alleges that some statement in the present specification regarding what is known about friction stir welding vis-à-vis heat treatment of aluminum alloys would negate the obviousness of annealing after friction stir welding. This is not persuasive of patentability because while the statements in the specification may reflect the present applicant's knowledge, such statements cannot be held to encompass all knowledge of practitioners in the aluminum processing art.

Art Unit: 1742

4. The terminal disclaimer filed on June 3, 2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent 6,660,106 has been reviewed and is accepted. The terminal disclaimer has been recorded.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Wyszomierski whose telephone number is (571) 272-1252. The examiner can normally be reached on Monday thru Friday from 8:00 a.m. to 4:30 p.m. Eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached on (571) 272-1244. Effective July 15, 2005, all patent application related correspondence transmitted by facsimile must be directed to the new central facsimile number, (571)-273-8300. This new Central FAX Number is the result of relocating the Central FAX server to the Office's Alexandria, Virginia campus.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GPW
July 18, 2005


GEORGE WYSZOMIERSKI
PRIMARY EXAMINER
GROUP 1100